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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/690,783

10/21/2003

David J. Monnie

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12/12/2006

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EXAMINER

SEYE, ABDOU K

ART UNIT

PAPER NUMBER

2194

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,783

Applicant(s)

MONNIE ET AL.

Examiner

Abdou Karim Seye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 37-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 37-48 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08/23/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This is the initial office action based on the application filed on October 21, 2003.

Claims 1-48 are currently pending and have been considered below.

Election/Restrictions

2. This Office Action is in response to application filed on October 21, 2003, and the telephone conversation with Applicant's representative Kaven L Russell on December 1, 2006. Claims 1-36 are elected for examination.

Applicant is required to cancel non-elected claims 37-48 in the next response to this office action.

3. *Restriction to one of the following inventions is required under 35 U.S.C.121:*

- I. Claims 1-36, drawn to a system for monitoring share object space shared among plural application, classified in class 718 and subclass 1.
- II. Claims 37-48, drawn to a system for operating virtual machines having shared object space and private heap inaccessible to of the plural applications, classified in class 718 and subclass 104.

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, Group I requires monitoring object space among shared among plural application and sending data pertaining to an operation to a processing unit and displaying statistical information in the form of graphical representation, while the invention of Group II requires operating virtual machine having shared object space and private heap inaccessible to other plural applications. Therefore, the inventions of Groups I and II are patentably distinct.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter and are separately classified, restriction for examination purposes as indicated is proper.

During a telephone conversation with Kevin L Russell, attorney for the applicant on December 1, 2006, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-36. Affirmation of this election must be made by applicant in replying to this Office action. Claims 37-48 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in

the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 13 and 25 recite the limitation "the operation". There is insufficient antecedent basis for the limitation in these claims. Dependent claims 2-12, 14-24 and 26-36 are also affected by the same rejection.

A correction is required.

Claims 2-3, 8, 14-15, 20, 26-27 and 32 contain the trademark/trade name "Java" and "Sun Microsystems". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph (see *Ex parte Simpson*, 218 USPQ 1020; Bd. App. 1982). The claim scope is uncertain

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since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade names are used to identify/describe a family of products generated in the proprietary programming language called "Java" and brand name "Sun Microsystems", accordingly, the identifications/descriptions are indefinite.

Depend claims 4, 16 and 28 are also affected by the same rejection.

Appropriate changes are required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103 (a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-36 are rejected under 35 U.S.C. 103 (a) as being unpatentable over McGuire et al (20030097360) in view of Li et al. (US 7143392).

Claims 1, 13 and 25: MaGuire discloses a system for the concurrent operation of plural computer applications, each said computer application operating in its own virtual machine, said system comprising:

(a) A shared object space selectively connectable to each said plural computer application, said shared object space capable of storing at least one object accessible to each said plural computer application when connected to said shared object space (Abstract; fig. 2, paragraph 53 and 54); and

(b) A processing unit operably connected to a display (fig. 1 paragraph 50 and 51).

But he does not explicitly disclose:

(c) A monitor associated with said shared object space capable of collecting data pertaining to the operation of said shared object space and sending said data to said processing unit, said processing unit capable of processing said data into statistical information pertaining to the operation of said shared object space for graphical representation on said display; and

(d) A said monitor comprising a shared monitor space in said shared object space, said shared monitor space storing references to objects having time varying data pertaining to the operation of said shared object space, where said time varying data referred to in said shared monitor space may be selectively sampled at a desired frequency.

However, in the same field of endeavor, Li discloses a computer system monitoring and analysis data that collect, process statistical information and use and advanced graphical visualization techniques to visualize the system behavior on a display (col. 14, lines 45-67, col. 15, lines 1-67, col. 16, lines 1-67) and further discloses monitoring

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the timing latency, frequencies, CPU consumption time, and the display on how the timing latency is distributed along a selected path (col. 13, lines 58-67, col. 14, lines 1-45). It would be obvious to one having ordinary skill in the art at the time the invention was made to modify McGuire's invention with Li's invention to monitor the share object space while collecting data pertaining to the operation such as time, processing the data into statistical information for graphical representation display. One would have been motivated to include a resource monitoring component as one module that could be updated by McGuire's system in view of the fact that monitoring the resources usage of the system can not only reduce the amount of logged data and logged scenarios where the causality relationship does not need to fully captured but also provide an efficient management of time consumption by particular threads or applications consuming excessive time and resources within a shared space environment.

Claims 2, 14 and 26: McGuire further discloses a Java virtual machine (fig. 1/40).

Claims 3, 15 and 27: McGuire discloses a system as in claims 2, 14 and 26 above and further discloses a Java Native Method Interface (fig. 1, paragraph 50). The elements "Native OS" and "Java VM " of McGuire reference meets the claimed limitation of these claims.

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Claims 4, 16 and 28: McGuire discloses a system as in claims 3, 15 and 27 above and further discloses a default directory with a native language library file (fig. 2 paragraph 54 and 60). The elements "native code" and "JIT code " within a Java VM of McGuire reference meet the claimed limitation of these claims.

Claims 5, 17 and 29: McGuire discloses a system as in claims 1, 13 and 25 above and further discloses a non-object-oriented application (paragraph 54). The element "C" of McGuire reference meet the claimed limitation of these claims:

Claims 6, 18 and 30: McGuire further discloses a non-object oriented program such as "C" (paragraph 54).

Claims 7, 19, and 31: McGuire discloses a system as in claims 1, 13 and 25 above and further discloses that the access to said at least one object by said plural computer applications is synchronized (paragraph 76).

Claims 8, 20 and 32: McGuire discloses a system as in claims 1, 13 and 25 above and further discloses that said shared object space is operably connectable to a Sun Microsystems virtual machine; Java is a trademark of Sun Microsystems Inc., therefore the element "java" of the McGuire's reference meet the claimed limitation.

Claims 9, 21 and 33: McGuire discloses a system as in claims 1, 13 and 25 above.

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But McGuire does not disclose that the said plural computer applications pertain to a communication processing or Internet services. However, in the same field of endeavor, Li discloses a communication processing and a computer network such as the internet (fig. 12, col. 28, lines 15-25; col. 28, lines 35-46). It would be obvious to one having ordinary skill in the art at the time the invention was made to modify McGuire's invention with Li's invention to collect data pertaining to the operation for internet services. . One would have been motivated to include the function of monitoring the Internet services component as one element that could be updated by McGuire's system in view of the fact that the behavior of multi-threaded software applications running in a multi-processor environment such as the Internet can be. Therefore a user/administrator of a system may quickly and easily view multiple pieces of information in order to get a complete picture of the runtime behavior of a software component.

Claims 10, 22 and 34: McGuire discloses a system as in claims 1, 13 and 25 above and further discloses a global name space in said shared object space (fig. 5/560).

Claims 11, 23 and 35: McGuire discloses a system as in claims 1, 13 and 25 above and further discloses that the said at least one object is copy shared among said plural applications (paragraph 94).

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Claims 12, 24 and 36: McGuire discloses a system as in claims 1, 13 and 25 above and further discloses that the said at least one object is direct shared among said plural applications (paragraph 46). The element "shared objects cannot be changed by an application after they have been loaded" of McGuire's reference means that, objects are directly shared among application before they are loaded. Therefore the claimed limitation are meet.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

IBM Technial disclosure Bulletin, February 1, 1992, US (19920201), page Number 184-185, volume number: 34, Issue Number: 9 "Method for display of resource Utilization in windows within one parent Window".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Abdou Seye whose telephone number is (571) 270-1062. The examiner can normally be reached Monday through Friday from 7:30 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, contact the examiner's supervisor, William Thomson at (571) 272-3718. The fax phone number for formal or official faxes to Technology Center 3600 is (571) 273-8300.

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Draft or informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 273-6722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-3600.

AKS
December 4, 2006

William Thomson
Supervisory Patent Examiner



WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
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